

ZIERHOFFER, August (Poznan)

On the unity of geography science. Czasop geograf 33 no.2:  
157-160 '62.

ZIERHOFFER, August (Poznan)

Ryszard Wiszniewski's globe isotherms. Czasopismo geograficzne 32  
no.1:5-16 '61.

ZIERHOFFER, August.

Marginal notes on a book by K.Scharlau. Przegl geogr 32 no.1/2:  
137-146 '60. (EEAI 9:10)

(Scharlau, Kurt)  
(Population)  
(Food)

ZIERHOFFER KAROL

ZIERHOFFER, KAROL.

Nazwy miejscowe polnocnego Mazowsza. (Wyd. 1.) Wrocław, Zakład im. Ossolinskih,  
1957. 417 p. (Polska Akademia Nauk. Komitet Językoznawczy. Prace onomastyczne,  
3.) (Place names of northern Masovia. 1st ed. fold. maps, bibl., footnotes,  
tables) MIDW Not in DLC Poland

SO: MONTHLY INDEX OF EAST EUROPEAN ACCESSIONS (EEAI) LC, VOL. 7, NO. 1, JAN. 1958

STRMISKA, Cestmir, inz.; ZIERIS, Miroslav

The BA 21 automatic packaging machine. Prum potravin 15  
no. 74342-346 J1 '64.

1. Zavody Vitezneho unora National Enterprise, Branch  
Enterprise 04, Pardubice.

ZIERMANN, Margit

Application of the Smirnov theorem in a storage problem. Mat.  
kut kozl MTA 8 Series B no.4:509-518 '63(publ. '64).

RENY, Alfred; ZIERMANN, Margit

Extreme value tasks in connection with the inventory of retail  
stores. Mat kut kozl MTA 5 no.4:495-506 '60. (BEAI 10:8)  
(Inventories) (Retail trade)

ZIERMANN, S.

The innovator movement in current-supply enterprises. n. h.  
(UJITOK LAPJA. Vol. 9, no. 16, Sept. 1957, Budapest, Hungary)

SO: Monthly List of East European Accessions (EPAL) IC. Vol. 8, no. 12, Dec. 1957.  
Uncl.



ZIERNOWA, E.

Treatment of ramie fibers with the help of machinery used in the manufacture of linen. Tr. from the Russian.

p. 137  
Vol. 8, no. 5, Sept./Oct. 1954  
PRZEMYSŁ WLOKIENNICZY  
Lodz

SO: Monthly List of East European Accessions (EEAL), LC, Vol. 5 no. 2  
Feb. 1956

ZIERSKI, Marian

Leslaw Wegrzynowski. 1885-56; in Memoriam. Gruzlica 24 no.11:  
1085-1091 Nov 56.

(OBITUARIES,

Wegrzynowski, Leslaw (Pol))

(BIOGRAPHIES,

Wegrzynowski, Leslaw, biobibliog. (Pol))

ZIERSKI, Marian, prof. dr. med.; ZACHARA, Anna

Chemotherapy in patients with pulmonary tuberculosis excreting  
bacilli resistant to antitubercular drugs. Gruzlica 32 no.11:  
1019-1026 N '64

1. Z Katedry i Kliniki Ftizjatrii Studium Doskonalenia Lekarzy  
Akademii Medycznej w Szpitalu im. dr. A. Sokolowskiego w Lodzi  
(Kierownik: prof. dr. med. M. Zierski).

ZIERSKI, Marian, BEK, Eugenia; SIWINSKA, Irena; WOZNIAK, Stefania

One-year results of antibacterial therapy of recently discovered cavernous pulmonary tuberculosis. Gruzlica 32 no.2:97-105 F'64

1. Z Katedry i Kliniki Ftizjatrii Studium Doskonalenia Lekarzy AM w Lodzi; Kierownik: prof.dr.med. M.Zierski.

ZIERSKI, Marian

Treatment of pulmonary tuberculosis in patients infected with bacilli resistant to basic antibacterial drugs. Gruźlica 29 no.8:699-708 Ag '61.

1. Z Katedry i Kliniki Ftyzjatrii Studium Doskonalenia Lekarzy AM w Szpitalu im. dr A. Sokolowskiego w Łodzi.

(ANTITUBERCULAR AGENTS ther)

ZIERSKI, Marian; BUKALSKA, Zofia

Value of piperazine admide in the treatment of pulmonary tuberculosis.  
Gruzlica 29 no.8:709-719 Ag '61.

1. Z Kliniki Ftizjatrii Studium Doskonalenia Lekarzy AM w Szpitalu  
im. dr A. Sokolowskiego w Lodzi Kierownik: prof. dr med. M. Zierski.

(TUBERCULOSIS PULMONARY ther)  
(PIPERAZINES ther)

ZIERSKI, Marian; BEK, Eugenia; STACHLEWSKA, Stanisława; WANAT-KONDRATOWICZ, Władysława; WOZNIAK, Stefania; ZACHARA, Anna

Evaluation of results of antibacterial therapy of patients with recently diagnosed pulmonary tuberculosis under clinical conditions. Gruzlica 32 no.8:621-625 Ag '64.

1. Z Katedry i Kliniki Ftizjatrii Studii Dokształcania Lekarzy Akademii Medycznej w Szpitalu im. dr. A. Sokolowskiego w Łodzi (Kierownik: prof. dr. med. M. Zierski).

ZIERSKI, Marian; BUKALSKA, Zofia

Morphanzinamide (Piazolina) in the treatment of pulmonary tuberculosis. Gruzlica 32 no.3:205-215 Mr '64.

1. Z Katedry i Kliniki Ftizjatrii Studium Doskonalenia Lekarzy Akademii Medycznej w Szpitalu im. dr. A. Sokolowskiego w Lodzi (Kierownik: prof. dr. med. M. Zierski).



JUCHNIEWICZ, Mieczyslaw; MADEY, Jan; STOPCZYK, Jan; ZIERSKI, Marian

Antibacterial therapy in the plan for tuberculosis control in  
Poland. Gruzlica 32 no.8:567-614 Ag '64.

ZIERSKI, Marian, prof. dr. med.; KWIEKOWA, Agnieszka; LESKIEWICZ, Halina

The status of infectious tuberculosis in Poland. Gruzlica 32  
no.11:949-959 N '64

1. Z Zespołu Nadzoru Specjalistycznego Instytutu Gruźlicy.

ZIERSKI, Marian

Chronic bronchitis in patients with pulmonary tuberculosis.  
Gruzlica 33 no.5:417-420 My '65.

1. Z Katedry i Kliniki Ftizjatrii Studium Doskonalenia Lekarzy  
AM w Szpitalu im. dr. A. Sokolowskiego w Lodzi (Kierownik: prof.  
dr. med. M. Zierski).

ZIERSKI, Marian

Comparison of the effect of morphazinamide and pyrazinamide  
in the treatment of chronic tuberculosis. Gruzlica 33 no.9:  
769-771 S ' 65.

1. Z Katedry i Kliniki Ftizjatrii Studium Doskonalenia Lekarzy AM (Kierownik: prof. dr.med. M. Zierski).

ZIERSKI, Marian; GAJEWSKA, Elzbieta

On the metabolism of morphazinamide in the treatment of  
chronic pulmonary tuberculosis. Gruzlica 33 no.9:773-777  
S ' 65.

1. Z. Katedry i Kliniki Ftizjatrii Studium Doskonalenia  
Lekarzy AM (Kierownik: prof. dr. med. M. Zierski).

EXCERPTA MEDICA Sec. 6 Vol. 11/8 Aug. 57  
ZIERSKI M.

4794. ZIERSKI M. and KRÓLIKOWSKI W. Zakł. Fizyol. Inst. Doskonalenia i Spec.

ZIERSKI, Marian, MOKRZYCKI, Mikolaj, SIWINSKA, Irena

Results of treatment of pulmonary tuberculosis in adults with antimicrobial drugs together with ACTH and cortisone. Gruzlica 25 no.5:269-286 May 1958

1. Z Kliniki Fizjoterapeutycznej w Łodzi Instytutu Doskonalenia i Specjalizacji Kadr Lekarskich. Kierownik: doc dr med. M. Zierski. Adres: Łódź, ul. Narutowicza 37.

(TUBERCULOSIS, PULMONARY, ther.

ACTH & cortisone with antituberc. drugs, results (Pol))

(ACTH, ther. use.

tuberc., pulm., with antituberc. drugs (Pol))

(CORTISONE, ther. use

same (Pol))

ZIERSKI, M; KOISUT, H; KOZLOWSKI, H.

Case of anicteric leptospirosis simulating meningitis. Polski tygod.  
lek. 11 no.24:1084-1086 11 June 56.

1. Z Zakladu Ftyzjatrii Inst. Doskonalenia i Specjalizacji Kadr Lekarskich  
i ze Szpitala Ftyzjatrycznego im. dra Alfreda Sokolowskiego w Lodzi;  
kier. doc. dr. med. Marian Zierski. Lodz, ul. Narutowicza 37.

(LEPTOSPIROSIS, differential diagnosis,  
meningitis (Pol) )

(MENINGITIS, differential diagnosis,  
leptospirosis (Pol))



ZIERSKI, Marian; BEK, Eugenia

Pneumothorax treatment in case of early pulmonary tuberculosis.  
Gruzlica 24 no.8:679-691 Aug 56.

1. Z Poradni Przeciwegrusiczej dla Mlodziezy Akademickiej i z  
Kliniki Ftyszjetrycznej Instytutu Doskonalenia i Specjalizacji  
Kadr Lekarskich w Lodzi. Kierownik: doc. dr. med. M. Zierski.  
(PNEUMOTHORAX, ARTIFICIAL, statist.  
in early pulm. tuberc.)

ZIELSKI, M.

~~WATKINS, J. E.~~

Tuberculosis and war. Gruslica 20 no. 5:609-620 Sept-Oct 1952.  
(CLML 24:2)

ZIERSKI, M.; NOKRZYCKI, M.

Antibiotics in preventive therapy of pulmonary tuberculosis.  
Gruzlica, Warsz. 19 no. 4:459-478 July-Aug. 1951 (GLML 21:3)

1. Of Municipal Lung Diseases Hospital No. 10 (Director--Marian  
Zierski, M. D.), Lodz.

ZIERSKI, M.

ZIERSKI M.

Graslica i jej zwalczenie wrod miodsiezy akademickiej w  
Lodzi. /Tuberculosis control among students in universities  
in Loda/ Pediat. polska 23:7-8 Nov-Dec 49 p. 739.

1. Report presented at IX. Polish Anti-Tuberculosis Congress  
in Lods. Sept. 1949.

ZIERSKI, Marian (Lodz)

Considerations on the problem of hormonal therapy in tuberculosis  
according to 5-year observation on 250 cases. Gruzlica 29 no.1:100-101  
Ja '61.

(ADRENAL CORTEX HORMONES ther)  
(TUBERCULOSIS ther)  
(CORTICOTROPINE ther)

KOLSUT, H.; ZIERSKI, M.

PAS therapy of pleural empyema. Gruzlica, Warszawa 18 no.2:226-230  
Apr-June 1950. (CIML 20:7)

1. Of the National Institute of Tuberculosis Branch in Lodz and  
of Chojna Municipal Hospital--Sanatorium (Director--Marian Zierski,  
M.D.).

ZIERSKI, Marian

Primary drug resistance of tubercle bacilli to basic anti-microbial drugs. Gruzlica 31 no.5:387-395 '63.

1. Klinika Ftizjatrii Studium Doskonalenia Lekarzy AM w Szpitalu im. dr A. Sokolowskiego w Lodzi Kierownik: prof. dr med. M. Zierski.

(MYCOBACTERIUM TUBERCULOSIS)  
(DRUG RESISTANCE, MICROBIAL)  
(STREPTOMYCIN) (AMINOSALICYLIC ACID)  
(ISONIAZID) (STATISTICS)

ZIERSKI, Marian

Difficulties and possibilities in the treatment of advanced pulmonary tuberculosis at the present time. Gruzlica 30 no.6: 539-546 '62.

1. Z Katedry i Kliniki Ftizjatrii Studium Doskonalenia Lekarzy AM w Szpitalu Specjalistycznym im. dr A. Sokolowskiego w Lodzi  
Kierownik: prof. dr med. M. Zierski.  
(TUBERCULOSIS, PULMONARY) (THERAPEUTICS)



ZIERSKI, Marian

"Good work". Polski tygod. lek. 15 no. 42:1623-1624 17 0 '60.

(TUBERCULOSIS prev & control)

ZIERSKI, M.

Tuberculosis control among students in universities in Lodz.  
Pediat.polska 23 no.7-8:739 N-D '49. (CML 19:2)

1. Report presented at IX. Polish Anti-Tuberculosis Congress in  
Lodz. Sept. 1949.

ZIERSKI, Marian (Lodz, ul. Narutowicza 37)

Significance of mass radiological examination of university students.  
Polski tygod. lek. 9 no.35:1108-1111 30 Aug 54.

1. Z Poradni Przeciwgrusliczej dla Mlodszy Akademickiej w Lodzi;  
kierownik: doc. dr Marian Zierski.

(TUBERCULOSIS, PULMONARY, prevention and control,  
mass x-ray of university students in Poland)

(UNIVERSITIES,

mass chest x-ray of students in Poland)

ZIERSKI, Marian (Lodz, ul. Narutowicza 37)

Development of pulmonary tuberculosis in adults. Polski tygod.  
lek. 9 no.13:388-392 29 Mar 54.

1. Z Poradni Przeciwgruźliczej dla młodzieży akademickiej i ze  
Szpitala dla gruźlicy im. dr A.Sokolowskiego w Łodzi, kierownik doc.  
dr med. Marian Zierski.

(TUBERCULOSIS, PULMONARY, physiology,  
develop. in adults)

ZIERSKI, Marian (Lodz, Narutowicza 37.)

~~Indications for resection of the pulmonary tissue in tuberculosis; views~~  
of a phthisiologist. Polski tygod. lek. 12 no.39:1511-1514 Sept 57.

1. Z Kliniki Petyzjatrycznej Instytutu Doskonalenia i Specjalizacji  
Kard Lekarskich w Lodzi; kierownik: doc. dr med. Marian Zierski.  
(PNEUMONECTOMY, in var. dis.  
tuberc., indic. (Pol))

OKULICZ -JASINSKA, Halina; ZIERSKI, Marian

Effect of pyrazinamide on hemostatic factors of the organism.  
Preliminary communication. Gruzlica 31 no.6:657-661 Je'63

1. Klinika Ftizjatrii SDL, Lodz.

\*

ZIMRSKI, Marian (Lodz, ul. Narutowicza 37/4)

Epidemiology of tuberculosis. Polski tygod. lek. 9 no.16:498-501  
19 Apr. 54.

(TUBERCULOSIS, epidemiology.)

KOLSUT, Halina; KOZLOWSKI, Henryk; ZIERSKI, Marian

Effect of various methods of the treatment with isonicotinic acid hydrazide and with streptomycin on tuberculosis in guinea pigs. Gruzlica 22 no.5:313-326 Ky '54.

1. Szpital Petyjatryczny im. dr A. Sokolowskiego w Lodzi. Kierownik: doc. dr med. M. Zierski. 2. Zaklad Anatomii Patologicznej Akademii Medycznej w Lodzi. Kierownik: prof. dr med. A. Pruszczyński.

(TUBERCULOSIS, experimental,

\*eff. of isoniazid & streptomycin)

(NICOTINIC ACID ISOMERS, effects,

\*isoniazid, on exper. tuberc., alone & with streptomycin)

(STREPTOMYCIN, effects,

\*on exper. tuberc., alone & with isoniazid)



ZIERSKI, Marian

Lung resection in tuberculosis (phthisiologist's views). Postępy hig.  
med. dosw. no.2:17-22 '60.

1. Z Kliniki Ftyzjatrycznej Studium Doskonalenia Lekarsky i Szpitala  
Specjalistycznego im. dra A. Sokolowskiego w Łodzi.

(PNEUMONECTOMY)

HORNUNG, Stanislaw; POLONCZYK, Miocyzslaw; DELOFF, Leonard; EERUBSKA, Barbara; GARNUSZEWSKI, Zbigniew; JAROSZEWICZ, Wiwa; JAWORSKI, Jan; MYSAKOWSKA, Helena; PARYSKI, Edwin; PECAK, Wladyslaw; PREGOWSKI, Wladyslaw; SOSNOWSKI, Wacław; WESTFAL, Irena; ZIERSKI, Marian

Primary resistance to basic antitubercular drugs in pulmonary tuberculosis patients observed in Poland during the period of 1961-1962. Gruzlica 32 no.8:629-636 Ag '64.

ZIETEK, J.

Analysis of the phenomenon of crosscracks when prestressing concrete elements.

p. 351 (Inzynieria I Budownictwo. Vol. 14, no. 10, Oct. 1957, Warszawa, Poland)

Monthly Index of East European Accessions (EFAI) LC. Vol. 7, no. 2,  
February 1958

0660823

1219  
Kajfasz S., Ziełek J. Twisted Wires for Wire Concrete.  
„Druty splecione w betonie strunowym”. Inżynieria i Budownictwo.  
No. 6, 1953, pp. 198-202, 3 figs., 10 tabs.

Methods of increasing the bond strength of concrete to wires in prestressed members. In view of the fact that the shorter the prestressed concrete members the more dangerous is the lack of bending strength, only wire concrete railway sleepers are considered, these being the shortest members of this type produced. After briefly discussing concrete specifications and wire surface properties, the authors examine the effects due to diameter and profile differences in various wires. Experimental results for sleepers with straight and folded wires are quoted and the numerical data are tabulated. A review is made of the advantages obtained by using twisted wires which constitute material superior to any other. With twisted wires, the amount of prestressing steel may be reduced by 20% and still the strength to crack formation is maintained at 39 t as required by the Railway Authorities.

*note 2*

ZIETEK, W.

Quantum theoretical derivative of the magnetic structure of anisotropic ferromagnetic monoocrystals. Bul Ac Pol mat 9 no.3:221-224 '61.

1. Instytut Fizyki, Uniwersytet, Wrocław, i Instytut Fizyki, Oddział Wrocław, Polska Akademia Nauk. Presented by W. Rubinowicz.

ZIETEK, W.

Phenomenological operator form for the anisotropic energy of  
single-axle ferromagnetics. Bul Ac Pol mat 10 no.8:451-455 '62.

1. Instytut Fizyki Teoretycznej, Uniwersytet, Wrocław.  
Presented by W. Rubinowicz.

P/045/62/022/Supplement/007/014  
B112/B186

AUTHOR:

Ziętek, W.

TITLE:

Influence of an external axial magnetic field upon the elementary domains in a uniaxial ferromagneticum

PERIODICAL:

Acta Physica Polonica, v. 22, Supplement, 1962, 127-142

TEXT: The influence of an external axial magnetic field  $\kappa$  upon the magnetic structure of a uniaxial ferromagnetic single crystal is investigated according to a quantum theoretical calculation method of the author (see Acta phys. Polon., 21, 175 (1962)). This method is based on minimizing the energy mean value

$$h = Q_1 + Q_2 \int \left\{ \frac{1}{2} - \kappa^2 \cos^2 \psi + q \cos \psi \right\} dv \quad (10)$$

of a certain class of quantum states. Here  $\psi$  denotes the angle of a rotation  $U$  by which the Hamiltonian  $H$  is transformed.  $\psi$  is the solution of the equation of minimization

$$2\kappa^2 \ddot{\psi} = \sin 2\psi - q \sin \psi: \quad (12)$$

$$\cos \psi = (1 - \omega \operatorname{sn} t) / (\omega - \operatorname{sn} t). \quad (13)$$

Card 1/2

Influence of an external axial ...

P/045/62/022/Supplement/007/014  
B112/B186

$\omega$  is determined by the boundary conditions, which do not take into account the influence of the boundary domains of the single crystal. It is shown that an external magnetic field causes prevailing a displacement of the Bloch walls in the interior of the crystal. The magnetization curve derived shows satisfactorily the well-known process of saturation. There are 6 figures. ✓

ASSOCIATION: Institut für Theoretische Physik, Universität Wrocław  
(Institute for Theoretical Physics, University of Wrocław)

SUBMITTED: April 9, 1962

Card 2/2



ZIETEK, W.

Influence of a uniform external magnetic field on Neel walls.  
Bul Ac Pol mat 11 no.1:27-30'63

1. Department of Physics, University of Colorado, Boulder,  
Colorado and Institute of Theoretical Physics, University,  
Wroclaw. Presented by W.Rubinowicz.

ZIETEK, W.

On the magnetostatic self-energy in the quantum mechanical treatment of the ferromagnetic domain structures. Bul Ac Pol mat 11 no.4:187-192 '63.

1. Institute for Theoretical Physics, University, Wroclaw.  
Presented by W. Rubinowicz.

WYSLOCKI, Boleslaw; ZIETEK, Walerian

Domain structure of ferromagnetics in the light of experimental research. Postepy fizyki 14 no. 3: 307-348 '63.

1. Instytut Metalurgii Zelaza, Gliwice (for Wyslocki).
2. Instytut Fizyki Teoretycznej, Uniwersytet, Wroclaw (for Zietek).

ZIETEK, Walerian

On Bloch walls in cubic ferromagnetic lattices. Pt.1. Acta  
physica Pol 25 no.1:117-138 Ja '64

1. Institute of Theoretical Physics, University, Wroclaw.

TOPIC TAGS: ferroelectric domain structure, ferroelectric microstructure, ferroelectric  
single crystal polarization

"APPROVED FOR RELEASE: 09/19/2001

CIA-RDP86-00513R002065110020-4

Card 1/2

APPROVED FOR RELEASE: 09/19/2001

CIA-RDP86-00513R002065110020-4"

"APPROVED FOR RELEASE: 09/19/2001

CIA-RDP86-00513R002065110020-4

ASSOCIATION: Instytut Fizyki Teoretycznej, Uniwersytet Wrocławski (Ticoreflec)

APPROVED FOR RELEASE: 09/19/2001

CIA-RDP86-00513R002065110020-4"

deriving a suitable general variational principle for the  
adequate description of an arbitrary (periodic) domain structure can be attained.  
The author is indebted to the author (Acta phys. Polon.,



RP5022622

AUTHOR: Wasilewski, Wieslaw; Zietek, Walerian

SOURCE CODE: PO/0045/55/028/001/0123/0140

ORG: Institute of Theoretical Physics, University of Wroclaw, Wroclaw (Uniwersytet Wroclawski, Instytut Fizyki Teoretycznej)

TITLE: Asymptomatic solutions in the microscopic theory of ferroelectric domain structures

SOURCE: Acta physica polonica, v. 28, no. 1, 1965, 123-140

TOPIC TAGS: Euler equation, microscopy, ferroelectric crystal, variational method, asymptotic solution, *ferromagnetic structure, crystal structure, crystal lattice, crystal lattice deformation*

ABSTRACT: Recently, a general microscopic formalism was proposed by W. Zietek which permits a uniform description of ferromagnetic as well as ferroelectric domain structures. The main idea of this approach consists of using inhomogeneous rotations of the spins or electric dipoles, respectively, and setting up a suitable variational principle. As variational parameters one can generally choose either the rotating angles or the direction cosines of the rotating axes. Use of the former description is preferable to facilitate the calculations though in principle both procedures are strictly equivalent. The present paper studies the applicability and efficiency of the latter procedure by applying it to some specific domain structures of ferroelectric crystals and imposing asymptotic boundary conditions. The variational

Card 1/2

L 18814-66

ACC NR: AP5022622

principle is derived for the case of an orthorhombic dipole-lattice, and the Euler-Lagrange equations are solved in the limit cases when the deviation from a cubic lattice is either remarkable or negligible (both in a specific sense). Effective formulas are given for the thickness and energy of three types of inter-domain walls, and the results are compared with those obtained through conventional methods. Moreover, a satisfactory qualitative explanation of the influence of particular homogeneous lattice-deformations on the direction of polarization and type of domain structure can be given. Orig. art. has: 4 figures and 65 formulas. [Author's abstract.]

SUB CODE: 20/ SUBM DATE: 18Jan65/ ORIG REF: 001/ OTH REF: 022

Cord 2/2 (44)

ZIETEK, W.

Influence of the external axial magnetic field on the elementary  
monaxial ferromagnetic regions. Acta physica Pol 22:Suppl.:  
127-142 '62.

1. Institut für Theoretische Physik, Universität, Wrocław.

ZIETEK, W.

On the classic Landau-Lifschitz theory of magnetic structure of monoaxial ferromagnetic monocrystals. Bul Ac Pol mat 10 no.5:317-324 '62.

1. Instytut Fizyki Teoretycznej, Uniwersytet, Wrocław. Presented by W. Rubinowicz.

ZIETEK, W.

Influence of the external vertical magnetic field upon the elementary regions in the uniaxial ferromagnetic. Pt. 1. Acta physica Pol 23 no.3:363-374 Mr '63.

1. Institut für Theoretische Physik, Universität, Wrocław.

ZIETEK, Walerian

Development of the views on the domain structure of ferromagnetics.  
Postepy fizyki 13 no.4:407-429 '62.

1. Instytut Fizyki Teoretycznej, Uniwersytet, Wroclaw i Instytut  
Fizyki, Polska Akademia Nauk, Wroclaw.

ZIETEK, Walerian

On magnetic structures in monoaxial ferromagnetic monocrystals.  
Acta physica Pol 22 no.1:37-64 J1 '62.

1. Institut für Theoretische Physik, Universität zu Wrocław, und  
Physikalisches Institut der Polnischen Akademie der Wissenschaften,  
Abteilung Wrocław.

S/058/63/000/001/093/120  
A160/A101

AUTHOR: Zietek, W.

TITLE: The classical theory of the magnetic structure of uniaxial ferromagnetic single crystals, developed by Landau and Lifschitz

PERIODICAL: Referativnyy zhurnal, Fizika, no. 1, 1963, 109, abstract 15735  
("Bull. Acad. polon. sci. math. astron. et phys.", no. 5, 1962, v.10, 317 - 324, German; summary in Russian)

TEXT: A more accurate calculation was carried out of the domain structure of a uniaxial ferromagnetic single crystal by the theory of Landau and Lifschitz (L. Landau, E. Lifschitz "Phys. Zs. Sov.", 1935, 8, 153). It is shown that the obtained structure is similar to the domain structure calculated by the author previously on the basis of the quantum-mechanical method (Referativnyy zhurnal, Fizika, 1962, 7E485).

[Abstracter's note: Complete translation]

Card 1/1



ZIETEK, Walerian

The magnetic structure of the anisotropic ferromagnetic monocrystal as a similar basic state. Acta physica Pol 21 no.2:175-184 P '62.

1. Institut für Theoretische Physik, Universität, Wrocław, und  
Physikalisches Institut der Polnischen Akademie der Wissenschaften,  
Abteilung Wrocław.

WYSLOCKI, B.; ZIETEK, W.

New powder patterns on the surface of a Fe-Si-single-crystal.  
Acta physica Pol 21 no.4:433-437 Ap '62.

1. Institut für Eisenmetallurgie, Gliwice (for Wyslocki). 2. Institut für Theoretische Physik, Universität, Wrocław, und Physikalisches Institut, Polnische Akademie der Wissenschaften, Abteilung Wrocław (for Zietek).

ZIETEK, W.

Magnetic structures in a hexagonal lattice. Bul Ac Pol Mat 9 no.8:  
599-604 '61.

1. Instytut Fizyki Teoretycznej, Uniwersytet, Wrocław i Instytut  
Fizyki, Oddział Wrocław, PAN. Vorgelegt von W. Rubinowicz.

33785

P/045/62/021/002/006/007  
B137/B102

24,710 0 (1153, 1454, 1136)

AUTHOR: Zietek, Walerian

TITLE: Magnetic structure of an anisotropic, ferromagnetic single crystal as an approach to the ground state

PERIODICAL: Acta Physica Polonica, v. 21, no. 2, 1962, 175 - 184

TEXT: A quantum-theoretical method for calculating the magnetic structure is presented, which can be applied to all ferromagnetic crystals with arbitrary lattice structure. The author proceeds from a general Hamiltonian which allows for isotropic Heisenberg exchange forces, anisotropic magnetic exchange interaction forces, and for magnetostriction. In particular, this Hamiltonian operator includes the multipole interaction with relevant exchange coupling constants and the form of the anisotropic, magnetic energy with the macroscopic anisotropy constants  $K_0$ ,  $K_1$ , and  $K_2$ , which are written in operator form. The state that is closest to the ground state of an anisotropic, ferromagnetic single crystal and, consequently, to its magnetic structure is selected from the class of competitive quantum states by minimizing the mean value of the Hamilton

Card 1/3

33785

P/045/62/021/002/006/007  
B137/B102

Magnetic structure of an ....

operator. The selection is carried out on the strength of the experimentally observed structures. For the sake of simplicity, the direction cosines of rotating spin vector are assumed to be constant throughout domains of the crystal. The mean energy is calculated by determining the mean value of the Hamilton operator in the class of states in question. This mean value is independent of the type and shape of the crystal. The angle of rotation of the spin vector is determined by the variational principle. For the purpose of calculating the magnetic structure, the crystal is decomposed into M domains. If the variation at the interfaces of these domains vanishes, one obtains M Euler-Lagrange equations which furnish the solution step by step. Continuity and differentiability depend on the boundary conditions at the surface of these domains. Professor Doctor S. Ingarden is thanked for valuable hints and discussions. There are 4 figures and 27 references: 11 Soviet-bloc and 16 non-Soviet-bloc. The four most recent references to English-language publications read as follows: van Vleck, J. H., Proc. Inst. Radio Engrs., 44, 1248 (1956); Phys. Rev., 78, 266 (1950); Conference on Magnetism and Magnetic Materials, Boston, 1956; Kittel, C., Rev. mod. Phys., 21, 541 (1949); Suppl. Nuovo Cimento, 6, 895 (1957); Dyson, F. J.,

Card 2/3

B/058/62/000/007/091/003  
A062/A101

24.2200

AUTHOR: Ziętek, W.

TITLE: Magnetic structures in hexagonal lattices

PERIODICAL: Referativnyy zhurnal, Fizika, no. 7, 1962, 64, abstract 7E485  
("Bull. Acad. polon. sci. Sér. sci. math., astron. et phys.", 1961,  
9, 599 - 604, German; Russian summary)

TEXT: On the basis of a previously treated method (Izvestiya Akad. Nauk SSSR, 1962, 3E511) a quantum-mechanical calculation of the domain structure of an ideal anisotropic ferromagnetic crystal having a hexagonal lattice is carried out. The results obtained by the author appear to be a certain generalization of known works by Bloch (Bloch, F., "Z. Phys.", 1932, 74, 295) and L. D. Landau and Ye. M. Lifshitz (Landau, L., Lifshitz, Ye., "Phys. Z. Sovietunion", 1935, 8, 153).

[Abstracter's note: Complete translation]

Card 1/1 \* 5/058/62/000/003/073/092

40280  
P/045/62/022/001/001/001  
B125/B102

24.2200

AUTHOR: Zietek, Walerian

TITLE: On magnetic structures in the uniaxial ferromagnetic single crystal

PERIODICAL: Acta Physica Polonica, v. 22, no. 1(7), 1962, 37 - 64

TEXT: Normally, the Bloch structure and the Landau-Lifshits structure of uniaxial ferromagnetic single crystals are calculated under very general conditions. The present method is more consistent because it takes account of the magnetic interaction in the Hamiltonian; also it takes more account of the lattice structure than the earlier methods do. However, only interactions between nearest neighbors are considered. The outer magnetic field as well as the influence of the classical dipole interaction and of magnetostriction are neglected. The Bloch wall and the marginal domains can be calculated without introducing artificial approximate assumptions but the calculations are extensive. Restricted to the terms which are bilinear in the spin operators the Hamiltonian reads:  $H = \sum_{\langle \alpha \beta \rangle} P^{\alpha \beta} S^{\alpha}_{\mu_1 \mu_2} S^{\beta}_{\mu_1 \mu_2}$

Card 1/4

P/045/62/022/001/001/001  
B125/B102

On magnetic structures in the...

using the designations of Ziętek (Acta phys. Polon., 21, 175 (1962)). The tensor  $P^{\alpha\beta}$  takes account of the isotropic exchange interaction (with the negative Heisenberg exchange integral  $A$ ) and of the anisotropic pseudo-dipole interaction (positive coupling constant  $C$ ). On these assumptions the magnetic structure of the inner layer has a kind of rotation invariant with respect to the hexagonal axis. The minimum mean energy of the inner layer is:  $\tilde{h}_0^I = 3nS^2(A_a + C_a) + 2nS^2(A_b - 2C_b) + (3/2)naS^2\Delta^{-1} \{ 2(4A_a + C_a)(3C_a - 4C_b) \}^{1/2}$ . The limiting process  $\Delta \rightarrow \infty$  ( $C_a = C_b = 0$  respectively) ensures correspondence with the isotropic ferromagnetic crystal. The Bloch walls in the marginal layer are strongly displaced and the inner domains of the Bloch structure are truncated considerably. On the crystal surface, free magnetic poles must be visible. The broader the elementary domains, the thinner is the marginal layer. In the Bloch structure the breadth of the elementary domains is  $\Delta_B = 2((2/3\varepsilon)aL_3)^{1/2}(w/G)^{1/4}$  with

Card 2/4



P/045/62/022/001/001/001  
B125/B102

On magnetic structures in the...

$$h_0^{\min} = -E_0 - E'_0 + E''_0 \sqrt{\frac{\varepsilon}{2}} \quad (5.4),$$

$$E''_0 = 6S^2 L_1 L_2 V_0^{-1} (3a GL_3)^{1/2} (W/G)^{1/2} > 0 \quad (5.5)$$

and in the Landau-Lifshits structure

$$\Delta_L = 2 \left( \frac{1}{3\varepsilon'} a L_3 \right)^{1/2} (W/G)^{1/2}, \quad (5.6),$$

$$\tilde{h}_0^{\min} = -E_0 - \frac{1}{2} E'_0 + \frac{1}{2} E''_0 \sqrt{\varepsilon'} \quad (5.7)$$

with

$$-E_0 = 3NS^2 (A_a + C_a) + 2NS^2 (A_b - 2C_b) < 0, \quad (5.2)$$

$$E'_0 = 3N_{12} S^2 a b^{-1} \sqrt{W/G} > 0,$$

$$W = -2(4A_a + C_a) > 0,$$

$$G = 4C_b^2 - 3C_a > 0$$

Card 3/4

On magnetic structures in the...

P/045/62/022/001/001/001  
B125/B102

and (5.5). With both these structures the breadth of the elementary domains depends only on the crystal thickness  $L_z$  in the hexagonal direction. The Landau-Lifshits structure is more favorable if  $L_z > L^0$ , the Bloch structure if  $L_z < L^0$ . Systematic observations of the structure existing in thick single crystals having different thickness but the same shape are desirable. There are 20 figures. 4

ASSOCIATION: Institute of Theoretical Physics, University of Wrocław;  
Physics Institute of the Polish Academy of Sciences,  
Department Wrocław

SUBMITTED: October 24, 1961

Card 4/4

ZIETEK, W.

Quantum theoretical deduction of the magnetic structure of anisotropic ferromagnetic monocrystals. Bul Ac Pol mat 9 no.3:221-224 '61.

1. Instytut Fizyki, Uniwersytet, Wrocław i Instytut Fizyki, Oddział Wrocław Polska Akademia Nauk. Presented by W. Rubinowicz.

(Crystallography) (Magnetic materials)

SERAFINSKA, Daniela; mgr.; ZIETKIEWICZ, Witold.

Influence of the bacterial flora on the acceptance of skin  
grafts in burns. Pol. tyg. lek. 20 no.11:392-394 15 Mr '65

1. Z Pracowni Mikrobiologii Instytutu Hematologii (Kierownik:  
mgr. D. Serafinska) i z Kliniki Chirurgicznej Instytutu Hemato-  
logii (Kierownik: doc. dr. med. Andrzej Tytrowicz [deceased])  
prof. dr. med. W. Rüdowski.

CZAYKOWSKI, Leszek E.; ZIETKIEWICZ, Janina

Results of synovectomy in chronic gonitis in children. Chir.  
narzad. ruchu ortop. Pol. 28 no.7:719-722 '63

1. Z Panstwowego Sanatorium Gruzlicy Kostno-Stawowej im.  
J. Krasickiego w Otwocku (Dyrektor: dr. J. Sowinski).

BOREJKO, Maria; SOWINSKI, Jerzy; ZIETKIEWICZ, Janina

Case of tuberculosis ossium pseudocystica multiplex. Pol. tyg.  
lek. 20 no.38:1427-1429 20 S '65.

1. Z Sanatorium Gruzlicy Kostno-Stawowej im. J. Krasickiego w  
Otwocku (Dyrektor: dr. med. Jerzy Sowinski).

ZIETKIEWICZ, Maciej, mgr.inz.

Intersectional transportation. Rudy i metale 7 no.7:328-330  
Jl '62.

ZIETKIEWICZ, Witold; NASIŁOWSKI, Wiesław

Homo-transplantation of the skin in the treatment of burns. Polski  
tygod.lek. 15 no.37:1406-1408 12 S '60.

1. Z Oddziału Chirurgicznego Instytutu Hematologii; dyrektor: doc.  
dr med. A.Trojanowski.

(SKIN TRANSPLANTATION)

(BURNS surg)



~~ZIEFKIEWICZ, W.~~

JAKIMOWICZ, Wladyslaw; BANACHOWSKA, F., (Gdansk); DOBROWOLSKA, B. J.;  
GOLDSZTAJN, M., (Krakow); CZARSKI, Z., (Lublin); KUBERSKI, Z.;  
SULAT, H.; SZULC, J., (Lodz); ~~ZIEFKIEWICZ, W.~~; SIEDL-  
KOLODZIEJOWA, A., (Poznan); MICHALOWICZ, R., (Szczecin);  
DOWGIALLO, M.; PUCILOWSKA, K., (Warszawa); GAJ, J., (Wroclaw);  
CHLOPICKI, Wl., (Zabrze).

Diagnostic statistics from neurological clinics during 1953.  
Neur. &c. polska 6 no.4:479-486 July-Aug 56.

(NERVOUS SYSTEM, dis.  
diag. statist. (Pol))

ZIETKIEWICZ, Witold

Effect of general systematic factors on the acceptance of skin grafts in burns. Pol. tyg. lek. 20 no.11:390-392 15 M-'65.

Transplantation of preserved autologous skin grafts. Ibid.: 394-395

Effect of cooling on the reduction of the depth and duration of tissue overheating in burns. Ibid.:395-396

"In vitro" digestion of burned necrotic skin by means of enzymes. Ibid.:396-398.

A new model of razor-blade dermatome. Ibid.: 402-403

Antidcubitus saline bed. Ibid.:406-407

1. Z Kliniki Chirurgicznej Instytutu Hematologii (Kierownik Kliniki: doc. dr. med. A. Trojanowski [deceased] i prof. dr. med. Witold Rudowski.

SIOMSKA-SCHMITT, Janina; ZIETKIEWICZ, Witold

Bacterial flora of burns. Pol. tyg. lek. 20 no.11:383-385  
15 Mr'65.

1. 1. Z Pracowni Mikrobiologii Instytutu Hematologii (Kierownika  
Pracownik: dr. J. Siomska-Schmitt) oraz z Kliniki Chirurgicznej  
Instytutu Hematologii (Kierownik: doc. dr. med. Andrzej Trojanowski  
[deceased] i prof. dr. med. Witold Budzowski.).

ZIETKIEWICZ, Zdzislaw, mgr inz.

Sources of direct current for movable receivers. Wiad elektrotechn  
34 no.4:97-102 Ap '65.

ZIETKIEWICZ, Zdzislaw, mgr inz.

Electrochemical current supply devices and their testing equipment.  
Wiad elektrotechn 30 no.5:163-167 My '62.

ZIETKOWIAK, Alfred, mgr inż.

A committee for nuclear engineering has been organized in Poznań. Przegl techn 85 no. 30: 10 26 J1 '64.

1. Chairman of the Voivodeship Contact Committee of the Central Technical Organization, Poznań.

BONARER Edmund, mgr inz.; HANUS, Danuta, mgr inz.; ZIETY, Jan, mgr

Methods of processing waste electrolytes from copper refineries.  
Rudy i metale 10 no.2:68-72 F '65.

MINKEVICIUS, A., glav. red.; KRIAUCIUNAS, J., red.; MASTAUSKIS, St., red.; SLAUTA, V., red.; STRUKCINSKAS, M., red.; ZAJANCKAUSKAS, P., red.; ZIEVYTE, Z., red.; SADAUSKAITE, A., red.; SARKA, S., tekhn. red.

[Practices in controlling plant diseases, pests, and weeds] Praktiskos kovos priemonės prieš augalų ligas, kenkejus ir piktžoles; straipsnių rinkinys. Vilnius, Valstybinė politinės ir mokslinės literatūros leidykla, 1962. 165 p. (MIRA 16:3)

1. Lietuvos TSR Mokslų Akademija, Vilnia. Botanikos institutas. (Lithuania--Plant, Protection of)



ZIGANGIROV, A.M.; SERGEYEV, L.I.; YUSUPOV, V.G.

Bioelectrical potentials in the yearly cycle of the development  
of wild roses. Trudy Inst. biol. UFAN SSSR no. 43:103-105 '65  
(MIRA 19:1)

1. Institut biologii Bashkirskogo gosudarstvennogo universiteta.

POLOZHENTSEV, I.P.; ZIGANGIROV, A.M.

Pine forests of the Southern Urals. Priroda 49 no.7:  
74-76 J1 '60. (MIRA 13#7)

1. Bashkirsкая лесная опытная станция Всесоюзного  
научно-исследовательского института лесоводства и механизации  
лесного хозяйства, Уфа.  
(Ural Mountains--Pine)

34041  
S/109/62/007/001/020/027  
D201/D301

6.9440

AUTHOR: Zigangirov, K.Sh.

TITLE: The normal distribution expression of the Val'd (WALD) distribution

PERIODICAL: Radiotekhnika i elektronika, v. 7, no. 1, 1962,  
164 - 166

TEXT: M.S. Bartlett, using the mechanism of the diffusion processes theory (Ref. 2: The large sample theory of sequential tests, Proc. Cambridge Philos. Soc., 1945, 42, 239) has given an approximate expression for the distribution function of duration of sequential tests in terms of the normal distribution function. For the same case Val'd has obtained from the characteristic function the following expression for the distribution function of test durations

$$P_c(t) = \frac{\sqrt{c}}{\sqrt{2\pi}} \int_0^t \tau^{-\frac{3}{2}} e^{-\frac{c}{2}(\tau + \frac{1}{\tau})} d\tau, \quad (1)$$

Card 1/2

34041

S/109/62/007/001/020/027  
D201/D301

The normal distribution ...

where  $t$ -time, referred to the average test duration. In the present short communication the author shows that the Val'd distribution may be expressed by normal distribution in the form of

$$P_c(t) = \Phi\left(\frac{t-1}{\sqrt{t}} \sqrt{c}\right) + e^{2c} \Phi\left(-\frac{t+1}{\sqrt{t}} \sqrt{c}\right) \quad (3)$$

where  $\Phi(x) = \frac{1}{\sqrt{2}} \int_{-\infty}^x e^{-\frac{y^2}{2}} dy$  - the normal distribution function.

From it, using the asymptotic expressions for  $\Phi(x)$ , the resolution of  $P_c(t)$  is obtained for two limiting cases; the condition  $t \ll \min(1, c)$  and for  $t \gg \max(1/c, 1)$ . The author acknowledges the help of A.Ye. Basharinov and B.S. Fleyshman. There are 5 references: 4 Soviet-bloc and 1 non-Soviet-bloc. The reference to the English-language publication reads as follows: M.S. Bartlett, the large sample theory of sequential tests, Proc. Cambridge Philos. Soc., 1945, 42, 239.

SUBMITTED: January 4, 1961  
Card 2/2

15026

S/109/63/008/001/003/025  
D262/DJ086.9600  
6.9700

AUTHOR:

Zigangirov, K. Sh.

TITLE:

Search problem in a system with finite number of positions

PERIODICAL: Radiotekhnika i elektronika, v. 8, no. 1, 1963, 16-23

TEXT: Sequential and self-tuning search procedures are analyzed and compared showing the superiority in speed of the self-tuning system. It is assumed that signal is present only in one of  $n$  channels, with equal likelihood for all channels. The search apparatus converts output values from channels into logarithms of probability ratios and compares them with threshold values. Probabilities of false alarm and of missed signal, and of average search durations, with signal present or absent, are calculated for both search systems. The self-tuning system is always searching in the channel for which the instant probability of the signal presence is at maximum. If several channels are equally suspect, the channel to be searched is selected among them, the chance of

Card 1/2

Search problems in ...

S/109/63/008/001/003/025  
D262/D308

selection being equal for all channels. The search is finished when the probability ratio logarithm exceeds a predetermined value signifying that signal is present, or when logarithms in all channels are below a value signifying that there is no signal. The case is analyzed in detail when probability logarithms vary at the instant of sampling as continuous normal random values, with dependent variations. The comparison of sequential and self-tuning systems shows that probability of false alarm (only if it is small), the probability of missing the signal, and search duration in the absence of signal are all approximately equal for both systems. When, however, the signal is received, search duration is shorter in the self-tuning system. The self-tuning system requires double memory capacity in comparison with the sequential system. The method adopted for calculating the duration of search is fully explained in the appendix. Guidance by A.Ye. Basharinov is acknowledged. There is 1 figure. X

SUBMITTED: December 19, 1961

Card 2/2



"APPROVED FOR RELEASE: 09/19/2001

CIA-RDP86-00513R002065110020-4

APPROVED FOR RELEASE: 09/19/2001

CIA-RDP86-00513R002065110020-4"



ZIGANGIROV, K.Sh.

Accuracy limits in the evaluation of the parameters of complex  
signals. Radiotekh. i elektron. 10 no.12:2232-2234 D '65.  
(MIRA 19:1)

1. Submitted April 1, 1965.

L 30395-66 EWT(d)/T/EWP(1) IJP(c) GG/BB  
ACC NR: AP6005869

SOURCE CODE: UR/0406/65/001/003/0118/0121

AUTHOR: Zigangirov, K. Sh.

ORG: None

TITLE: A nonparametric criterion for a comparison of selections

SOURCE: Problemy peredachi informatsii, v. 1, no. 3, 1965, 118-121

TOPIC TAGS: pattern recognition, mathematic method

ABSTRACT: The part of the statistical problem of image discrimination that pertains to pattern recognition according to a prescribed set of characteristics is applied in diagnostics (technical and medical), in the development of reading machines, and in the classification of signals in radiolocation. A problem close to this was studied in the theory of signal detection (I. W. Carlyle, I. B. Thomas. On nonparametric signal detectors. IEEE Trans. Inform. Theory, 1964, 10, 2, 146-152.) with nonparametric criteria being used for its solution. In the solution of real recognition problems the nature of general sets is often unknown, and it is necessary to use nonparametric criteria. Specifically, in the solution of problems on a comparison of two selections, use is made of the rank criteria of Kolmogorov-Smirnov and Wilcoxon. The present author investigates a rank criterion which is almost as effective as the Wilcoxon criterion, but is free of the latter's short-comings. The study is limited to the

UDC: 621.391.18

Card 1/2

51  
49  
B

ZIGANGIROV, K.Sh.

One nonparametric criterion for the comparison of samples.  
Probl. pered. inform. 1 no.3:118-121 '65. (MIRA 18:11)

ZIGANGIROV, K.Sh. (Moskva)

Optimum search of the maximum of a modulus function in presence  
of noise. Izv. AN SSSR. Tekh. kib. no.4:115-118 J1-Ag '65.  
(MIRA 18:11)

-119